



January 23, 2017

**BY ELECTRONIC FILING**

Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, D.C. 20554

**Re:     *Spectrum Bands Above 24 GHz et. al.*, GN Docket No. 14-177, IB Docket No. 15-256,  
          WT Docket No. 10-112, and IB Docket No. 97-95**

Dear Ms. Dortch:

On January 23, 2017, EchoStar Satellite Operating Corporation and Hughes Network Systems, LLC, (collectively “EchoStar”) and Inmarsat, Inc. (“Inmarsat”, and jointly, the “Satellite Operators”) met with the Commission’s International Bureau to discuss the Satellite Operators’ proposals for reconsideration of particular sections of the Report and Order in the above-referenced proceeding. EchoStar was represented by Jennifer A. Manner, Senior Vice President, Regulatory Affairs, Jodi Goldberg, Associate Corporate Counsel, Regulatory Affairs, and Brennan Price, Senior Principal Engineer, Regulatory Affairs, and outside counsel, William Wiltshire, of Harris Wiltshire & Grannis LLP. Inmarsat was represented by Giselle Creaser, Director, Regulatory. The Satellite Operators met to discuss the above-reference proceeding with Jose Albuquerque, Kerry Murray, Karl Kensinger, Chip Fleming, Paul Blais, Kal Krautkramer, and Steve Duall (by phone) of the Satellite Division, International Bureau.

In the meeting the parties discussed the attached talking points, which were distributed to the attendees.

Pursuant to the Commission’s rules, this notice is being filed in the above-referenced dockets for inclusion in the public record. Please contact me should you have any questions.

Respectfully submitted,

*/s/ Jodi Goldberg*

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**ECHOSTAR**

**HUGHES**

**inmarsat**

Attachment

cc: Jose Albuquerque  
Kerry Murray  
Karl Kensinger  
Chip Fleming  
Paul Blais  
Kal Krautkramer  
Steve Duall



**The Spectrum Frontiers Order Should Be Revisited  
To Ensure Advanced Broadband Services Are Available  
Across the Country**

- EchoStar Satellite Operating Corporation, Hughes Network Systems LLC, and Inmarsat, Inc. (collectively, the Broadband Satellite Operators) support the FCC's conclusions that the propagation and other characteristics of the 27.5-28.35 GHz (28 GHz) and 37.5-40 GHz (38 GHz) bands offer opportunities for spectrum sharing among services with different architectures and business plans. However, several of the FCC's conclusions in the Spectrum Frontiers proceeding did not sufficiently consider the relative costs and benefits of such decisions.
- As discussed below, by conducting a cost/benefit analysis for certain key areas, the FCC can achieve its stated goal of adopting rules that enable the growth and flexibility of both UMFUS and satellite broadband services. Accordingly, the FCC should:
  1. ***Revise the conditions for deployment of FSS earth stations.*** The following conditions adopted in the order, for which there is no support in the record, would seriously impair the ability of Fixed-Satellite Service ("FSS") operators to make productive use of valuable spectrum resources. Accordingly, the FCC should:
    - a. ***Eliminate its rule barring deployment of FSS earth stations near roads, railroads, event venues, and other specific locations.*** There is no analysis in the record that supports this limitation. To the contrary, the report cited by the FCC demonstrates that the fiber connectivity needed by earth station facilities is highly correlated with major roadways and railways. In addition, the rule is ambiguous at best and could lead to disputes between licensees.
    - b. ***Replace the "0.1 percent of population" metric for FSS earth station deployment with the AT&T/EchoStar coordination regime.*** There is no showing in the record that UMFUS operators would suffer economically or lack incentive to deploy their networks if they were able to serve less than 99.9% of all people located in their license areas. In addition, the analysis used to assess the impact on FSS deployment failed to reflect the true impact of this limitation. By contrast, the coordination regime jointly proposed by AT&T and EchoStar would strike an appropriate balance by reserving "urban core" areas for UMFUS deployment and allowing co-primary deployment in the remaining areas.



- c. ***Eliminate the rule limiting FSS operators to three earth stations in any given county (for 28 GHz) or Partial Economic Area (for 39 GHz).*** This rule is unnecessary if the FCC adopts the above coordination regime. Indeed, this rule would be counterproductive to the extent it would prevent FSS operators from locating more than three earth station facilities in areas with appropriate infrastructure but little or no impact on UMFUS.
2. ***Establish a mechanism to enable FSS operators to identify where UMFUS stations are operating.*** The FCC's rules require FSS operators to coordinate with any UMFUS provider that has facilities "constructed and in operation" in an area targeted for earth station deployment. The FCC's online licensing database needs to identify the UMFUS licensee, where the operations are located and whether operations have begun. This is critical information to ensure that FSS operators can efficiently build out their systems in a manner that protects both their operations and those of the UMFUS operator.
3. ***Clarify the application of the rules in two circumstances.*** First, the rules should be clarified to allow additional antennas at grandfathered 28 GHz earth station sites. This will allow FSS systems to evolve without causing additional interference to UMFUS operations. Second, the FCC's rules should be clarified to provide that most UMFUS service rules do not apply to FSS operators that acquire a UMFUS license at auction or in the secondary market for the sole purpose of protecting their earth station operations.
- The FCC should take this opportunity to examine more thoroughly the regime it has established for UMFUS/FSS spectrum sharing, and to make appropriate modifications to achieve a robust sharing the Commission envisions. The proposals above would help to realize that goal, and serve the public interest in facilitating the intensive and productive use of the valuable spectrum in the 28 GHz and 39 GHz bands.